

REMARKS

Claims 1-3, 5-21, 23-28, 30-42, 44-74, 76-85 and 87-123 are pending in the present application and all were rejected in the October 16, 2009 final Office Action. No amendments are being made herein. This paper follows and makes of record an interview held January 8, 2009 between Applicant's representatives and Examiner Gilbert. It is Applicant's understanding that this paper will be entered and the finality of the October 16, 2008 Office Action withdrawn.

Interview Summary

As an initial matter, Applicant would like to express gratitude to Examiner Gilbert for granting the telephone interview that took place on the morning of January 8, 2009 and for the courtesies extended during the interview.

At the interview, Applicant's representatives and Examiner Gilbert focused on the claim limitation that the insulating glass unit formed by the sheets, low-e coatings, and sealant assemblies has a U value "substantially equal to or less than 0.2 BTU/hr-sq ft-F." In that regard, the Examiner expressed that while the cited references do not disclose or suggest such U values, the present specification, at pages 8-9, recites that "[t]esting, as well as computer modeling, has shown that a U value . . . of approximately 0.2 BTU/hr-sq ft-F is required for the refrigeration door to prevent condensation on the outside of the glass under the performance requirements for the United States industry as described [earlier in the application]." On the basis of this disclosure, the Examiner has taken the position that the claims merely represent glass units that would necessarily have the features of those already known in the art.

In the discussion with the Examiner, Applicant argued that the recited U values are in fact values that Applicant determined through testing and computer modeling to be effective to

achieve the desired results, not values already known to do so. The Examiner acknowledged the possibility that he may have misinterpreted the disclosure and suggested Applicant file a response presenting its position again. The Examiner indicated that he would then conduct a further search and issue a non-final Office Action if he uncovered any art supporting further rejections. Applicant thus is presenting this communication in accordance with the Examiner's suggestion.

October 16, 2008 Office Action

Applicant provides the following additional comments on the outstanding rejections set forth in the October 16, 2008 Final Office Action.

Claims 1-3, 5-21, 23-28, 30-42, 44-74, 76-85 and 87-123 remain rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Heaney (USP 4,477,129) in view of Misonou (USP 6,830,791).

The Examiner's full rationale is set forth at pages 2-10 of the October 16, 2008 final Office Action. With respect to the independent claims, i.e., 1, 26, 47, 61, 71, 90, 104, and 117, the Examiner has asserted that the Heaney reference discloses a door having inner, outer and middle sheets of glass, first and second sealants, a frame, and a coating that can be placed on virtually any of the sheets of glass. The Examiner has acknowledged (at page 3 of the Office Action) that Heaney does not disclose "two emissivity coatings." In fact, Applicant notes that Heaney identifies no low-emissivity coatings, nor makes any mention of emissivity at all. Rather, the Examiner relies on the disclosure of Misonou for its reference to a single emissivity coating, and concludes that it would have been obvious to one of ordinary skill in the art to use "emissive" coatings in order to aid in reduction of heat transfer through glass sheets. The

Examiner also acknowledged (at page 3 of the Office Action) that the cited documents do not disclose the U values of the pending claims but stated that it nevertheless would have been obvious, as a matter of design choice, for a refrigerator door to have the claimed U values. As justification for this position, the Examiner pointed to pages 8-9 of the Applicant's own specification's detailed description (not Background Section), which indicates that Applicant's own testing and computer modeling has shown that U values of approximately $0.2 \text{ BTU/hr-ft}^2\text{-F}$ are required for the refrigeration door to prevent condensation on the outside of the glass under the performance requirements of U.S industry standards.

In response, Applicant respectfully traverses the Examiner's rejection. In that regard, Applicant first directs attention to the discussion above regarding the reference to U values in the specification.

Moreover, Applicant respectfully submits that one of skill in the art would not arrive at the claimed invention upon combining teachings found in Heaney and Misonou, even in light of the disclosure at pages 8-9 of the present specification. Applicant reiterates that neither of the documents cited by the Examiner discloses a U value of $0.2 \text{ BTU/hr-ft}^2\text{-F}$ or less, an emissivity of 0.04 or less or any specific value that would substantially prevent condensation on a refrigerator door without the need for the application of electricity. In fact, neither of the cited documents even mentions a U value or an emissivity value. Moreover, while Misonou makes a passing reference to a "refrigerator," Misonou has little or nothing to do with the claimed invention. It does not contemplate the reduction of condensation without the need for electricity, nor does it contemplate any problem experienced in the refrigeration industry that the present invention is designed to address. Misonou therefore cannot be combined with Heaney to arrive at or even suggest the claimed refrigeration door. It merely discusses emissive coatings on glass

surfaces. As such, the cited art simply does not teach one of ordinary skill in the art how to construct or use a door that is capable of functioning in accordance with the Applicant's claimed invention. As noted previously, and discussed with the Examiner, the Office Action's rejection relies on the Applicant's own detailed description of the invention (not Background) for its support. Simply put, therefore, without the Applicant's own specification, one could not arrive at the Applicant's claimed invention.

Moreover, even if one of skill in the art were to combine the teachings of Heaney and Misonou, at best he would arrive at a multi-pane system that included and required air between two of the glass panes and a vacuum between two of the glass panes, as in Misonou. Applicant respectfully submits that the present invention does not teach, suggest, or even contemplate a vacuum disposed between two glass panes of the claimed multi-pane system. Thus, the combination of Heaney and Misonou teaches away from the present invention and since neither of these documents teaches, suggests, or even contemplates U values, one of skill in the art would not be able to determine the U value of a multi-pane system represented by the combination of the disclosures of Heaney and Misonou.

The Examiner, at page 9 of the outstanding Office Action, contends that U values are an inherent feature of low emissivity coatings, such as those provided by Misonou. Applicant respectfully submits that this contention is not accurate. It is known to those of skill in the art that U values can be influenced by low-E coatings. However, with respect to the present invention, Applicant would like to direct the Examiner's attention to page 9, paragraph 0037 of the present specification, whereby it is stated that the U values, more specifically, the optimal U values, are driven by numerous factors, including temperature differences, glass thickness, spacing between the glass, the gases used in between the glasses, the spacer material, the number

of panes, humidity, the absorption coefficient of the coating as well as the desired evaporation time of any condensation that may form. Thus, the U values reported and claimed by Applicant are a reflection of these numerous factors being taken into account. The U values reported and claimed are not solely dictated by the low-E coatings claimed. Accordingly, Applicant respectfully submits that the judicious choice of at least: low-E coatings, spacer systems and frames, glass pane thicknesses, number of glass panes, gases disposed between the glass panes and sealant assembly has led to the subject matter of the present invention, i.e., a multi-pane refrigerator door with a U value less than $0.2 \text{ BTU/hr-ft}^2\text{-F}$ or an emissivity value of less than 0.04. For at least the reasons presented herein, the cited art fails to teach or suggest the invention as claimed. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejections set forth in the October 16, 2008 Final Office Action.

Applicant believes that the remarks presented herein fully address the concerns set forth in the October 16, 2008 final Office Action and that the application is in condition for allowance. Early and favorable action is awaited. The Examiner is requested to telephone the undersigned if it is deemed to expedite prosecution.

Respectfully submitted,

By



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